

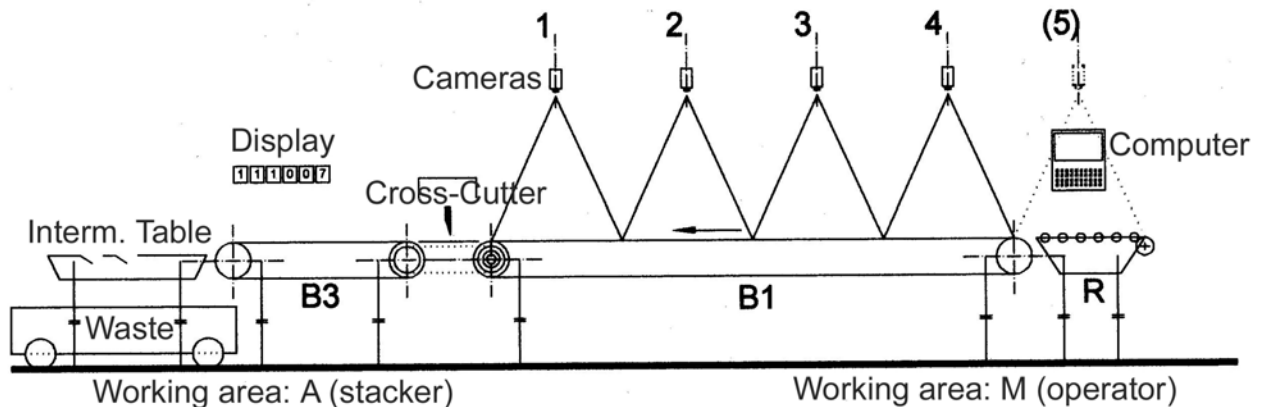
FO3 High-Speed Cross-Cut System



The FO3 High-Speed Cross-Cut System for veneer contains all features of the optimising system described in the leaflets:

FOY FO3 Vermessung und Zuschnittoptimierung

FO Furnieroptimierung



The following elements are of special importance for the systems performance:

1. The **operator M** is working independent of the machine functions and the stacker A,

- he pulls the veneer-bundle from the pallet (right),
- grades quality and type of grain,
- marks defects and areas of the same quality,
- puts new data into the computer, as far as they differ from the predecessor,
- starts the machine-cycle (3 different variants) and pulls the next bundle from the pallet.
- He can check the optimisation result but he must not do so.
- In this case the computer-screen shows:
 - whether the optimisation result is worse than a preset limit and
 - whether a work-order-item is fulfilled by processing the actual bundle and thus controlling the works progress.

Normally he uses approx. 1 sqm floor space as working area and does not need to leave it while working.

2. The **machine** with computer and control unit has the following functions:

- the bundle can be manipulated free on the roller conveyor R,
- belt-conveyor B1 moves the bundle into the camera position,
- 3 (or 4, depending on the bundle's length) cameras generate the surface of the bundle with a 4400 mm maximum length (optional extra: 5500 mm with 5 cameras),
- the optimising system generates the cut-to-size pattern,
- the belt-conveyors B1 and B3 move the bundle through the cross-cutter and the cuts are either at once taken away by the stacker or layed down on an intermediate table,
- the cuts can be identified on a display:
 - work-order item (= storing place number) and length,
 - additionally 2 joining widths.

Before work 1 of 2 operating procedures has to be set:

- Standard: each optimisation result is checked on screen,
- Quick-start: the cross-cut process starts immediately after optimisation without any check.

While working the operator can select 3 different machine-cycle starts:

- manual camera positioning by soft-key F8,
- automatic camera positioning by soft-key "Start",
- at continuous processing a sensor controls the feeding of a bundle and starts the cycle without any manual input.

3. The **stacker(s)** A must:

- read the display,
- catch the next cut and
- put it to the store at the display-indicated place number corresponding to work-order item.

The stacker(s) can stop the system for a short time in case of delay.

4. The manual **sorting and grading** of raw material can be replaced by the machine. Those bundles, that are more suitable for other work-orders will not be cut and are fed out for other purposes.

Basic idea of the machine-concept is to have the operator free from the machine-cycle and the stackers activities, because the operator as high-skilled specialist is the most valuable capacity in process. Maybe that 2 or more stackers have to be engaged if the raw-material needs few operators inputs.

When processing raw material with many defects may be that 2 simultaneously working operators are more profitable.

The following data for a bundle of approx. 3300 mm length with 4 cross cuts describe the possible performance:

- machine-cycle of 14 to 12 seconds per bundle,
- theoretical maximum performance: 8 seconds per bundle.

